

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P519072

Luminaire Tested: **SQ4-WB-050U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519072
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

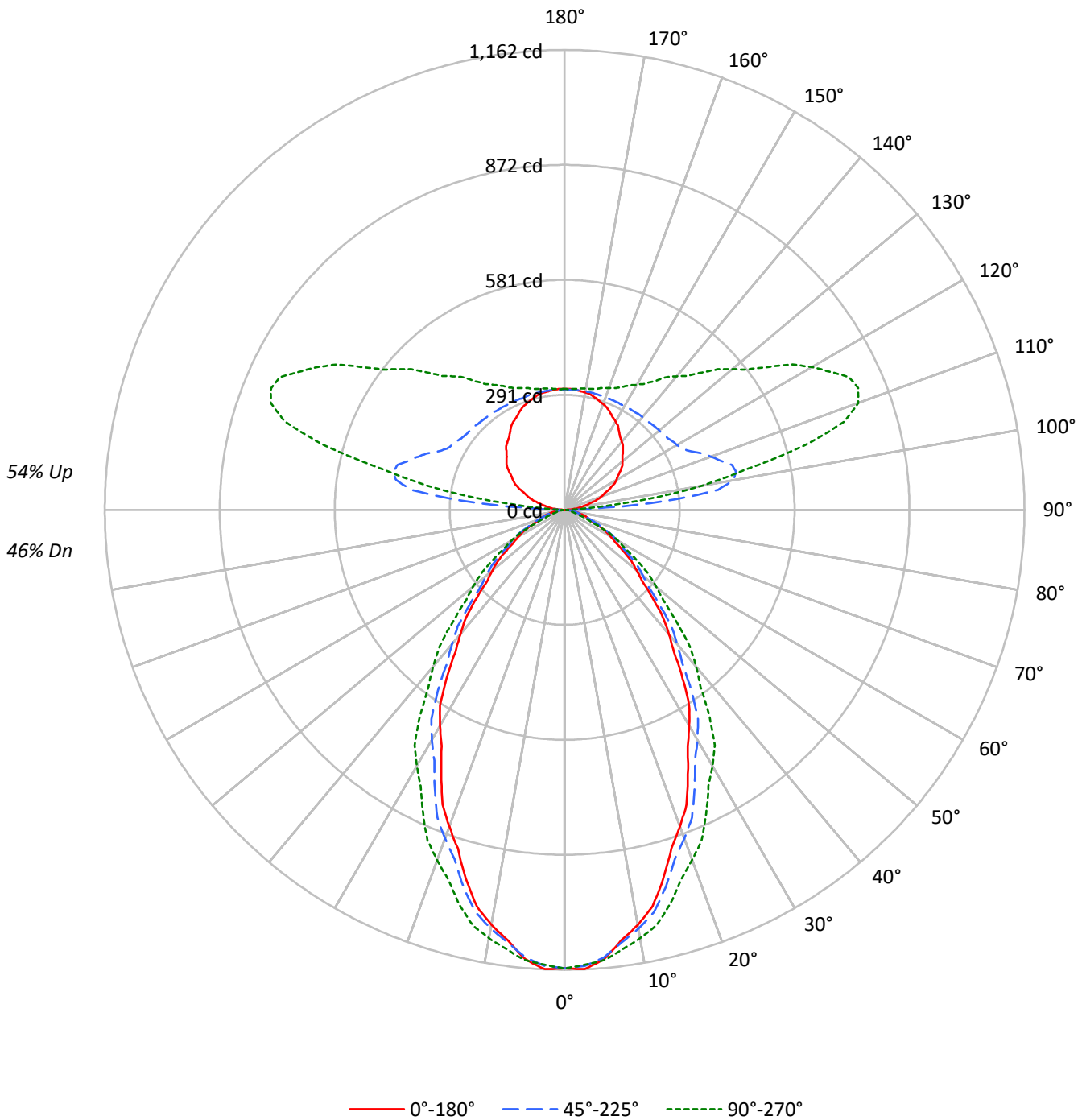
Lumens per Lamp: N/A
Luminaire Lumens: 3681.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10689	10689	10689
5°	10556	10518	10579
10°	9974	10064	10297
15°	9207	9421	9843
20°	8360	8675	9249
25°	7499	7908	8617
30°	6705	7144	7961
35°	5864	6287	7186
40°	4936	5327	6221
45°	4072	4425	5194
50°	3400	3707	4328
55°	2887	3182	3574
60°	2467	2759	2851
65°	1965	2321	1843
70°	1743	1810	1125
75°	1611	1469	688
80°	1488	1350	595
85°	1344	1239	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	2.9
10°-20°	276.4	7.5
20°-30°	358.0	9.7
30°-40°	350.6	9.5
40°-50°	268.4	7.3
50°-60°	178.8	4.9
60°-70°	97.6	2.7
70°-80°	40.7	1.1
80°-90°	12.7	0.3
90°-100°	146.4	4.0
100°-110°	397.8	10.8
110°-120°	409.0	11.1
120°-130°	327.0	8.9
130°-140°	257.0	7.0
140°-150°	197.0	5.4
150°-160°	141.7	3.8
160°-170°	86.7	2.4
170°-180°	29.2	0.8
0°-30°	740.7	20.1
0°-40°	1091.3	29.6
0°-60°	1538.6	41.8
0°-90°	1689.5	45.9
90°-120°	953.3	25.9
90°-150°	1734.4	47.1
90°-180°	1992.0	54.1
0°-180°	3681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1140	1128	1136	1138	1142	106
15°	964	960	986	1013	1030	269
25°	737	739	777	811	846	339
35°	521	523	558	596	638	324
45°	312	318	339	365	398	243
55°	180	187	198	205	222	163
65°	90	97	106	93	84	94
75°	45	45	41	28	19	48
85°	13	13	12	8	5	14
90°	1	4	7	9	9	2
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.6	1158.6	1158.6	1158.6	1158.6
2.5°	1161.5	1151.1	1153.7	1153.7	1150.5
5°	1139.8	1128.4	1135.7	1138.4	1142.3
7.5°	1097.5	1088.8	1102.3	1112.2	1120.3
10°	1064.6	1057.1	1074.2	1088.7	1099.1
12.5°	1026.3	1020.1	1041.3	1060.7	1074.3
15°	963.9	960.4	986.3	1013.1	1030.5
17.5°	897.1	895.4	925.1	956.4	978.6
20°	851.5	851.0	883.6	916.2	942.0
22.5°	805.6	806.7	840.9	874.8	904.2
25°	736.6	738.6	776.8	810.7	846.5
27.5°	672.9	673.8	713.3	749.0	787.2
30°	629.4	631.9	670.6	707.6	747.3
32.5°	585.9	588.7	626.6	664.9	705.4
35°	520.6	523.1	558.2	595.8	638.0
37.5°	453.3	456.7	487.8	523.4	564.9
40°	409.8	414.7	442.3	475.8	516.5
42.5°	367.9	374.0	399.6	431.3	468.1
45°	312.1	318.1	339.1	364.8	398.1
47.5°	264.2	271.0	287.1	309.2	337.7
50°	236.9	243.4	258.3	274.6	301.5
52.5°	212.9	219.4	232.6	245.3	268.1
55°	179.5	186.9	197.8	205.3	222.2
57.5°	152.0	159.2	167.8	171.2	181.4
60°	133.7	141.7	149.5	149.1	154.5
62.5°	117.0	123.8	131.6	126.2	126.5
65°	90.0	97.4	106.3	92.8	84.4
67.5°	72.7	74.3	83.4	64.7	54.7
70°	64.6	64.6	67.1	50.1	41.7
72.5°	56.8	56.8	54.5	40.8	31.9
75°	45.2	45.2	41.2	28.3	19.3
77.5°	34.9	34.5	31.5	21.1	14.0
80°	28.0	28.0	25.4	16.7	11.2
82.5°	21.9	21.9	19.7	13.0	8.3
85°	12.7	12.7	11.7	7.6	4.6
87.5°	4.7	5.2	5.4	4.2	3.8
90°	1.0	3.9	6.9	8.8	8.8
92.5°	8.8	40.1	69.6	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.5	391.0	304.2	213.7
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.5	99.6	443.6	542.3	467.9
105°	70.6	110.0	437.5	666.1	626.8
107.5°	87.3	122.0	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.7	789.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.5	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.6	334.7	646.4	755.5
120°	151.1	176.0	327.6	612.6	721.0
122.5°	159.7	184.6	322.9	578.8	683.3
125°	172.6	196.6	316.8	533.9	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	311.9	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	208.0	231.0	308.0	434.8	490.5
137.5°	218.4	239.3	306.8	412.5	459.3
140°	224.6	244.8	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.5	303.1	347.6	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.8	333.1
160°	284.5	291.2	302.1	321.9	327.6
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.8
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.1	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.0	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.6	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)